



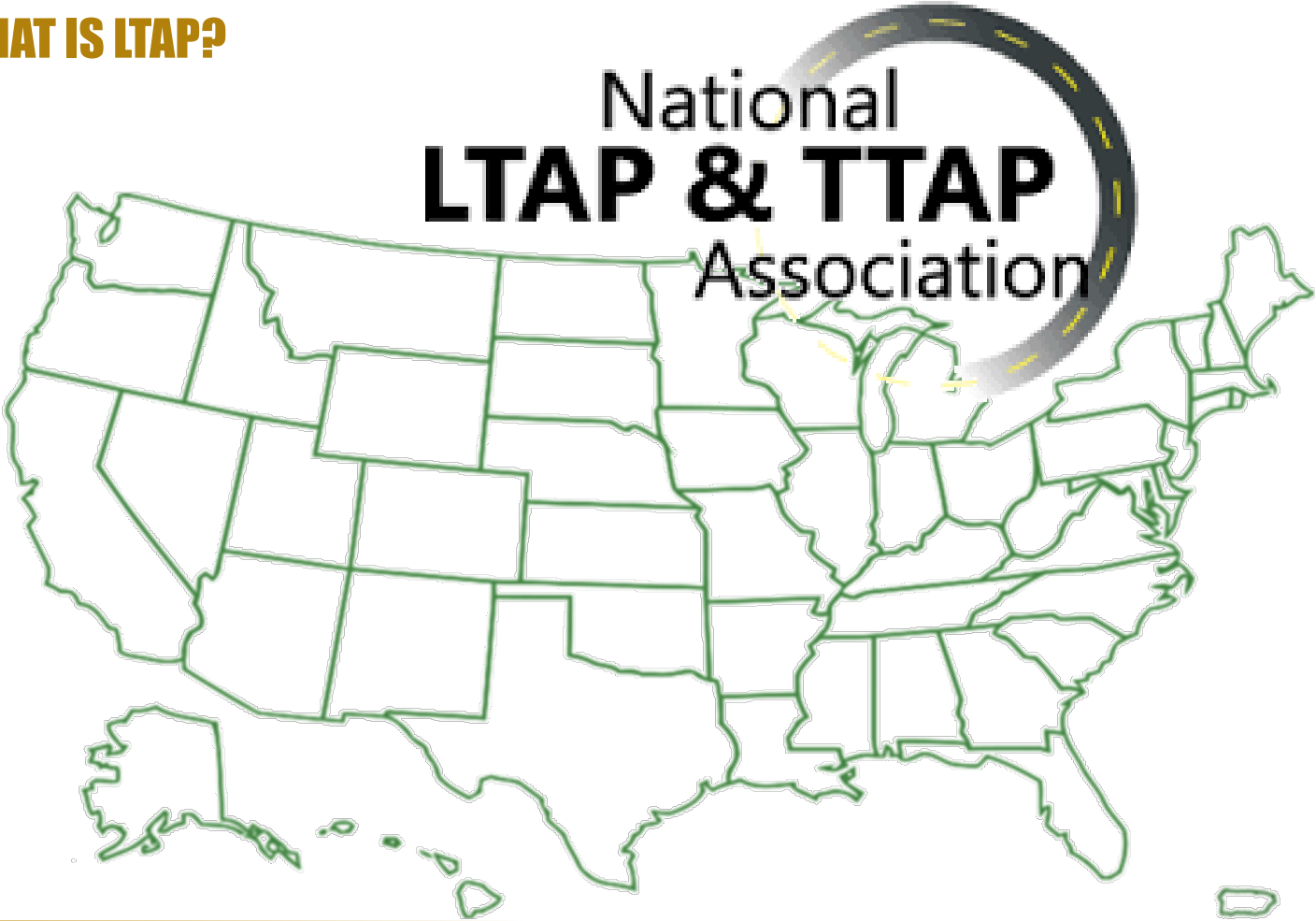
LOCAL AGENCY OUTREACH IN INDIANA: THE OBSTACLES, THE CHALLENGES, AND SOME SUCCESSES

Patrick Conner PE, Research Manager

October 16, 2019

BRIDGE PRESERVATION: LOCAL AGENCY OUTREACH

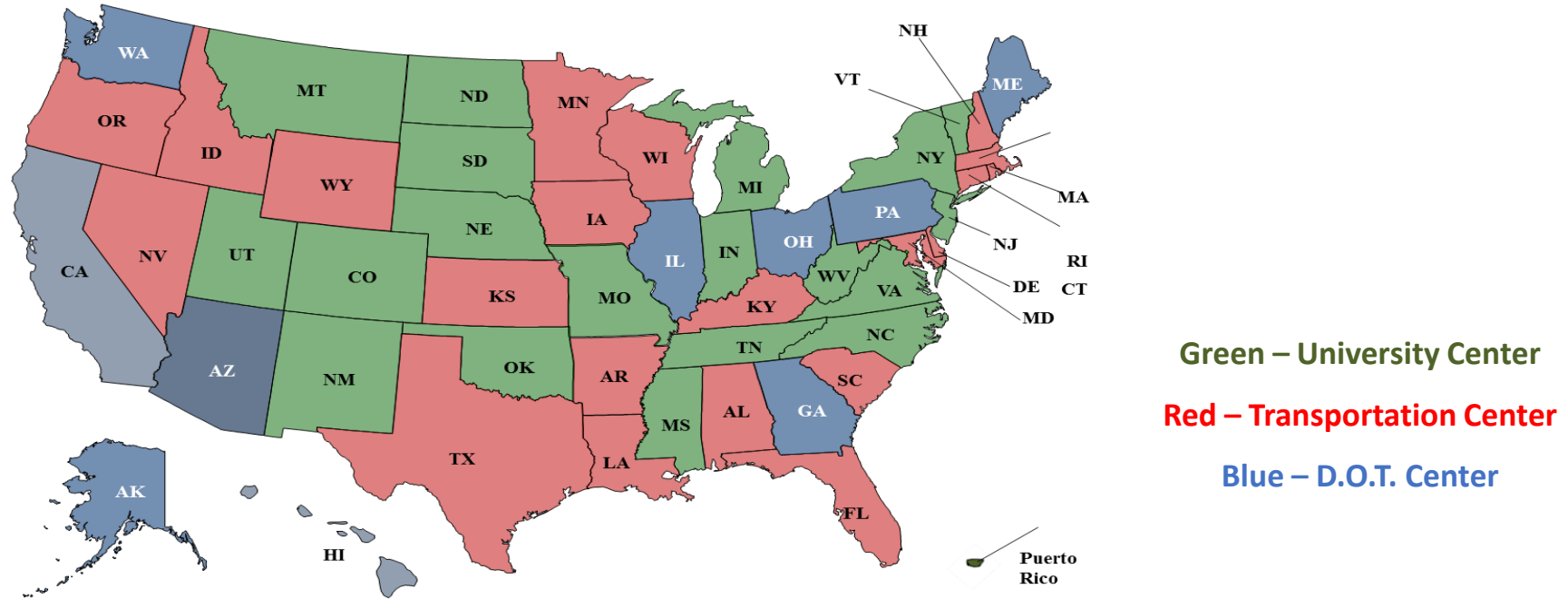
WHAT IS LTAP?



BRIDGE PRESERVATION: LOCAL AGENCY OUTREACH

WHAT IS LTAP?

National LTAP/TTAP Center Programs






INDIANA LTAP

VISION STATEMENT:

THE INDIANA LOCAL TECHNICAL ASSISTANCE PROGRAM (LTAP) IS THE PRIMARY RESOURCE FOR TRAINING, TECHNICAL ASSISTANCE, AND TECHNOLOGY TRANSFER FOR LOCAL GOVERNMENT AGENCIES AND INDUSTRY OFFICIALS WITH TRANSPORTATION RELATED RESPONSIBILITIES. INDIANA LTAP IS KNOWN AS AN INNOVATIVE, PROACTIVE, AND PRODUCTIVE PARTNER.






INDIANA LTAP

MISSION STATEMENT:

THE INDIANA LOCAL TECHNICAL ASSISTANCE PROGRAM ENHANCES THE SKILLS, KNOWLEDGE AND CAPABILITIES OF LOCAL TRANSPORTATION PROVIDERS TO FOSTER A SAFE, EFFICIENT, SUSTAINABLE AND WELL MANAGED TRANSPORTATION SYSTEM BY PROVIDING TRAINING, TECHNICAL RESOURCES, TECHNICAL ASSISTANCE, TECHNOLOGY TRANSFER, AND RESEARCH.



INDIANA LTAP

PERFORMANCE MEASURES

SAFETY: Improve awareness and increase the implementation of best practices in safety.

INFRASTRUCTURE (ASSET) MANAGEMENT: Promote best practices in planning, design, construction, maintenance, management and operations of the surface transportation system.

WORKFORCE DEVELOPMENT: Assist stakeholders in attracting, retaining and retraining a knowledgeable and skilled transportation workforce.

ORGANIZATIONAL EXCELLENCE: Deliver efficient services to stakeholders

RESEARCH: Conduct research to support local transportation agencies and promote the findings of state and national research that would benefit local agencies.

IT AND COMMUNICATIONS: Implement IT solutions to increase the effectiveness of LTAP activities and improve efficiencies at stakeholders locations.



BRIDGE PRESERVATION: LOCAL AGENCY OUTREACH

INDIANA LTAP EFFORTS CITIES, TOWNS AND COUNTIES

Indiana LTAP

- Affiliated with Purdue University in West Lafayette
- Provides Indiana Counties, Cities, and Towns with:
 - Training Programs, Workshops, and Conferences
 - Information Clearinghouse
 - New and Existing Technology Updates
 - Newsletters, Directories, and Publications



BRIDGE PRESERVATION: LOCAL AGENCY OUTREACH

INDIANA LTAP EFFORTS CITIES, TOWNS AND COUNTIES

Who we serve:

City & Town Street Commissioners and Street Department employees

County Highway Engineers, Supervisors, and Employees

City Mayors & Town managers

County Commissioners

County Surveyors

INDOT

MPOs/RPOs

Police Organizations

Consultants and Contractors



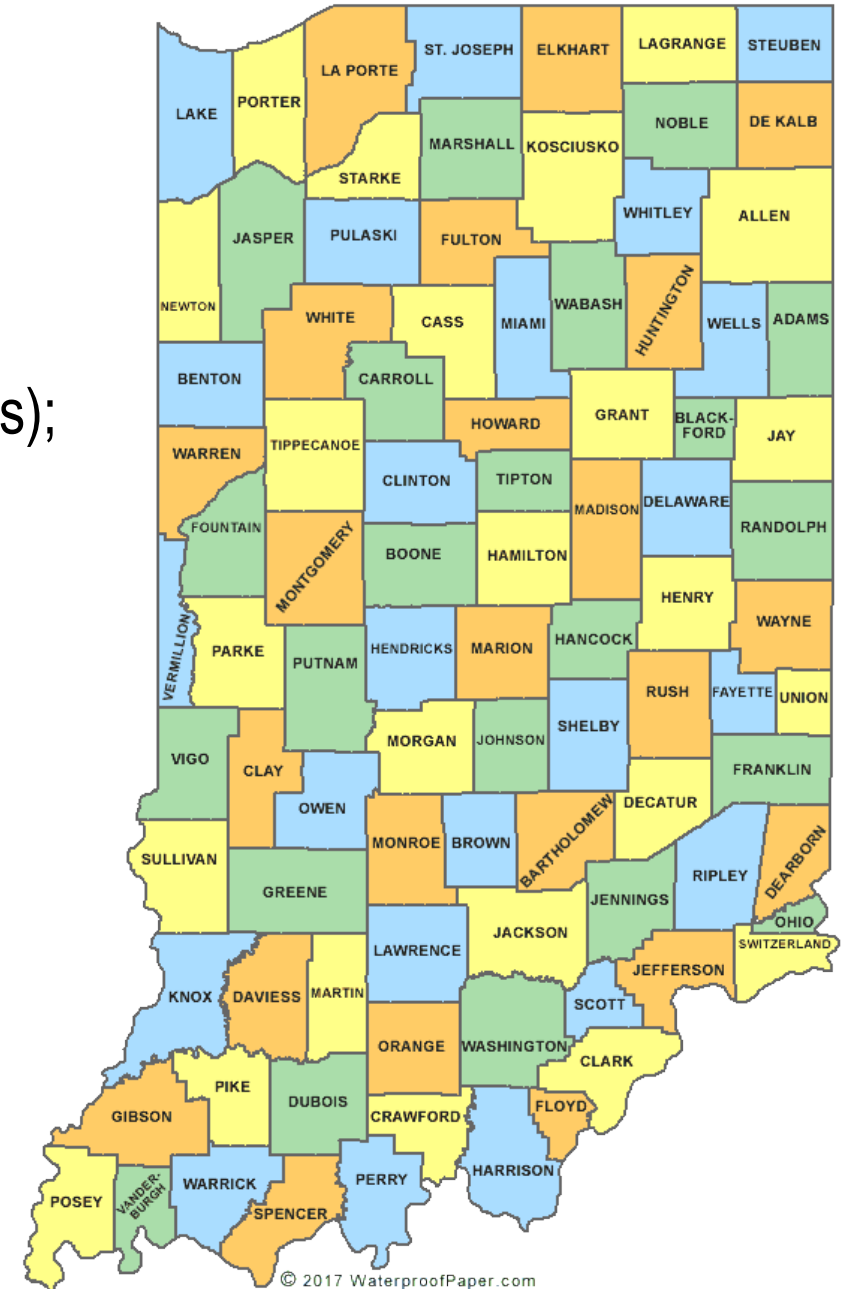


THE CHALLENGES

BRIDGE PRESERVATION: LOCAL AGENCY OUTREACH

THE CHALLENGES

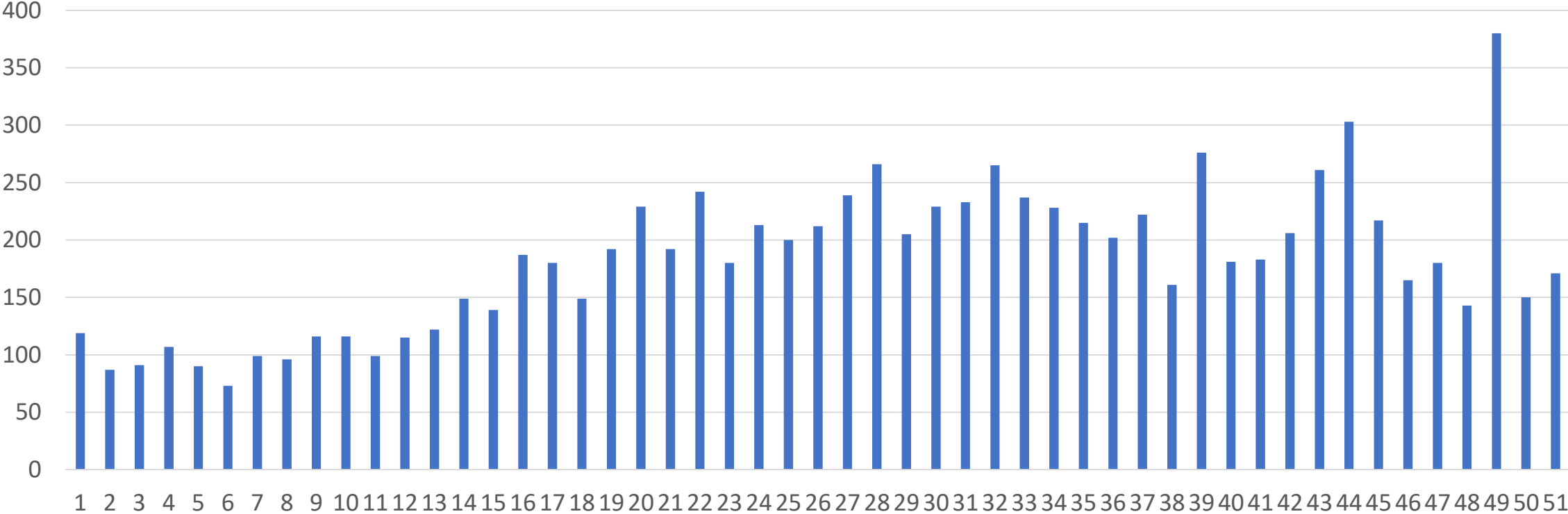
- ➔ 94 Local Bridge Owners (92 Counties + 2 Cities);
- ➔ 13,150 bridges;
- ➔ Deck Area = +32 million square feet
- ➔ 829 Bridges over 99 years old
- ➔ Average Age = 43.6 years



BRIDGE PRESERVATION: LOCAL AGENCY OUTREACH

THE OBSTACLES

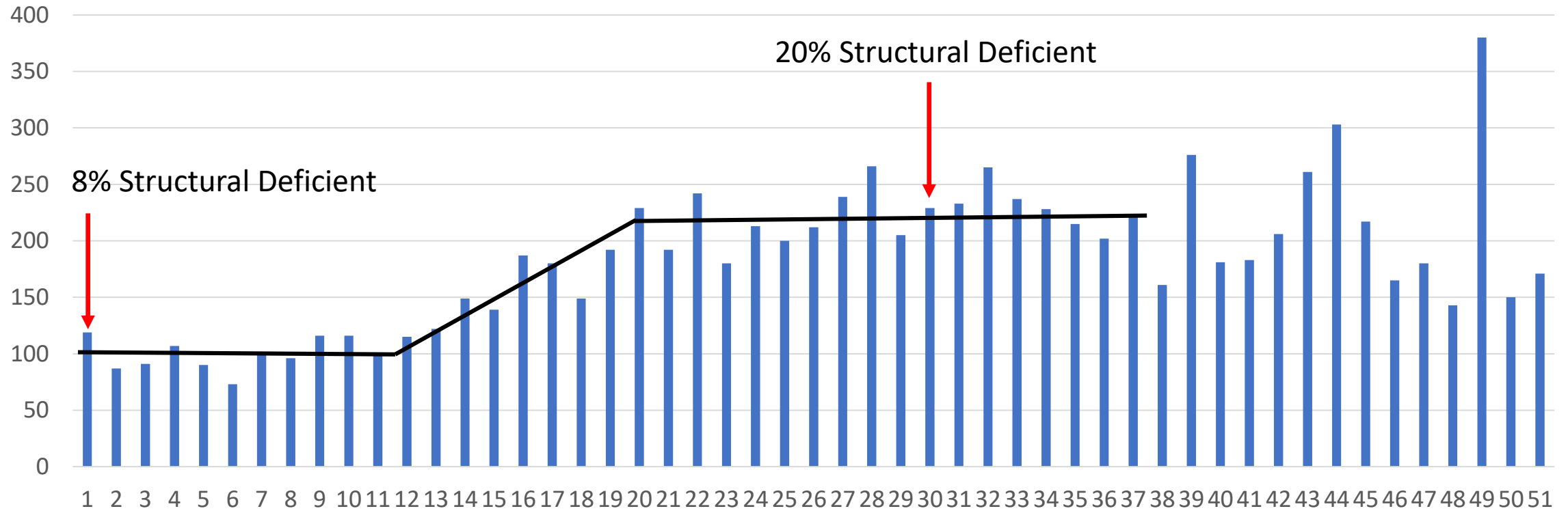
Bridge's by Age



BRIDGE PRESERVATION: LOCAL AGENCY OUTREACH

THE CHALLENGES

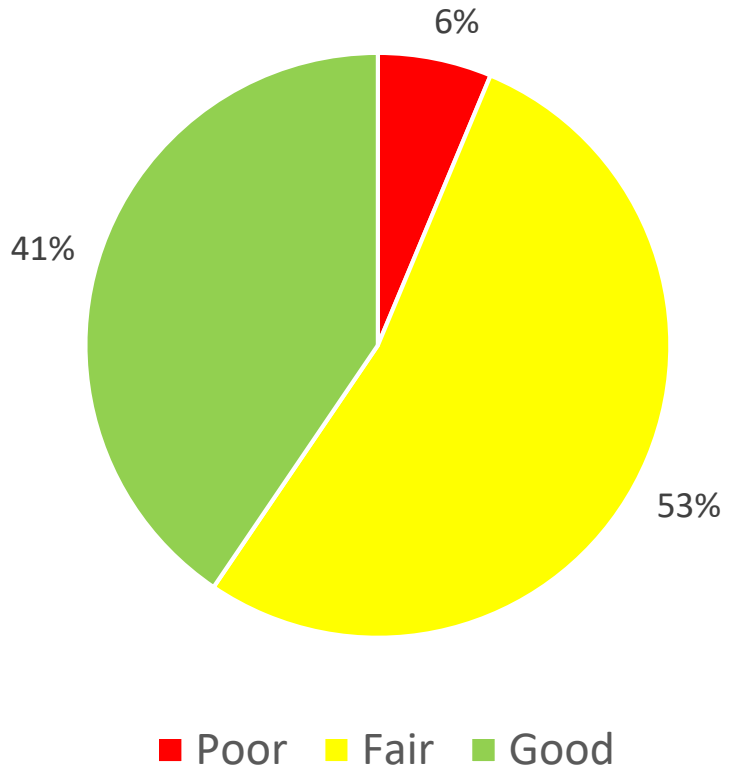
Bridge's by Age



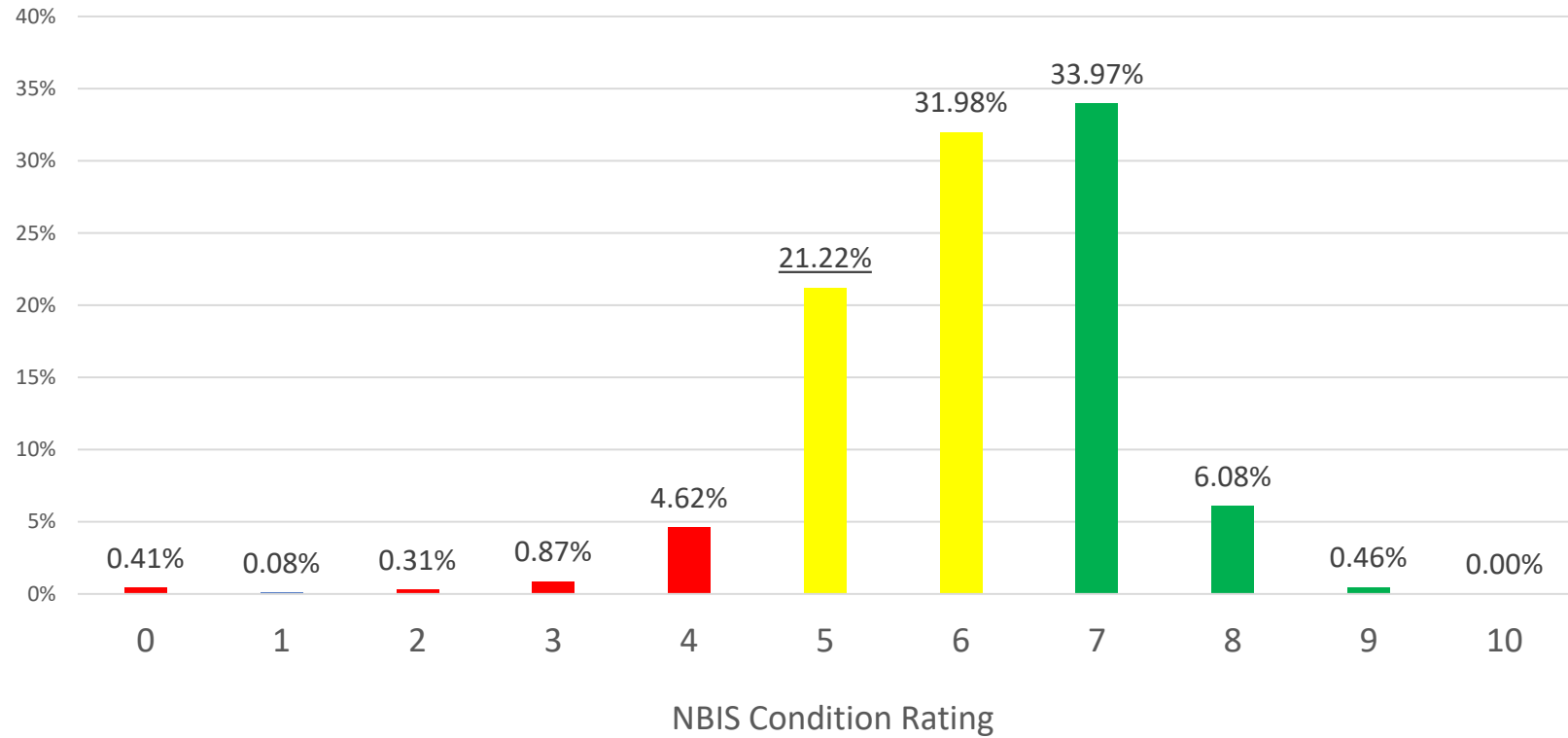
BRIDGE PRESERVATION: LOCAL AGENCY OUTREACH

THE CHALLENGES

Indiana Local Bridge Condition Data



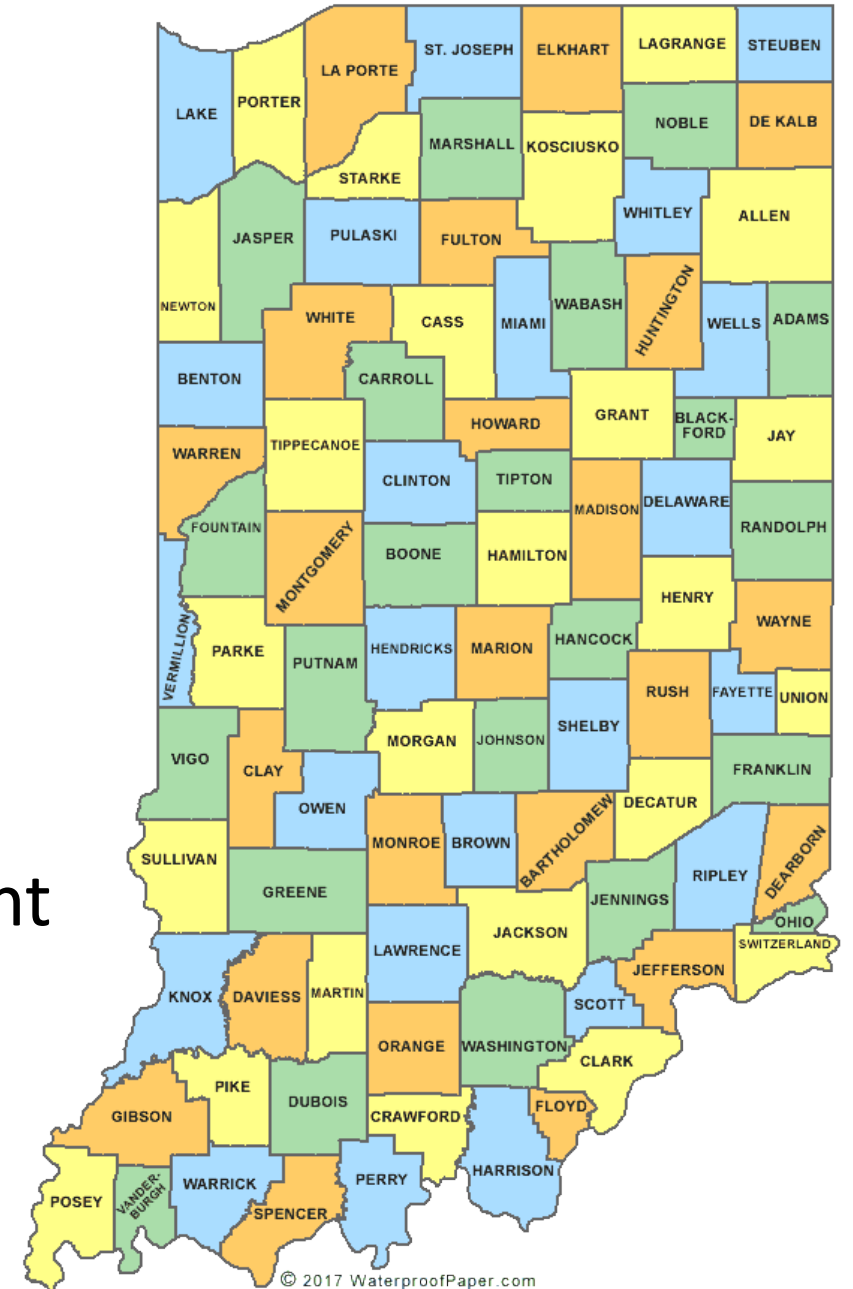
Percent of Limiting Condition by Deck Area



BRIDGE PRESERVATION: LOCAL AGENCY OUTREACH

THE CHALLENGES

- ➔ 94 Bridge Departments
 - Communication
 - Training
 - Employee Turnover
 - Example Bid Documents
 - \$\$\$ Bridge Asset Management and Optimization Tools





THE OBSTACLES



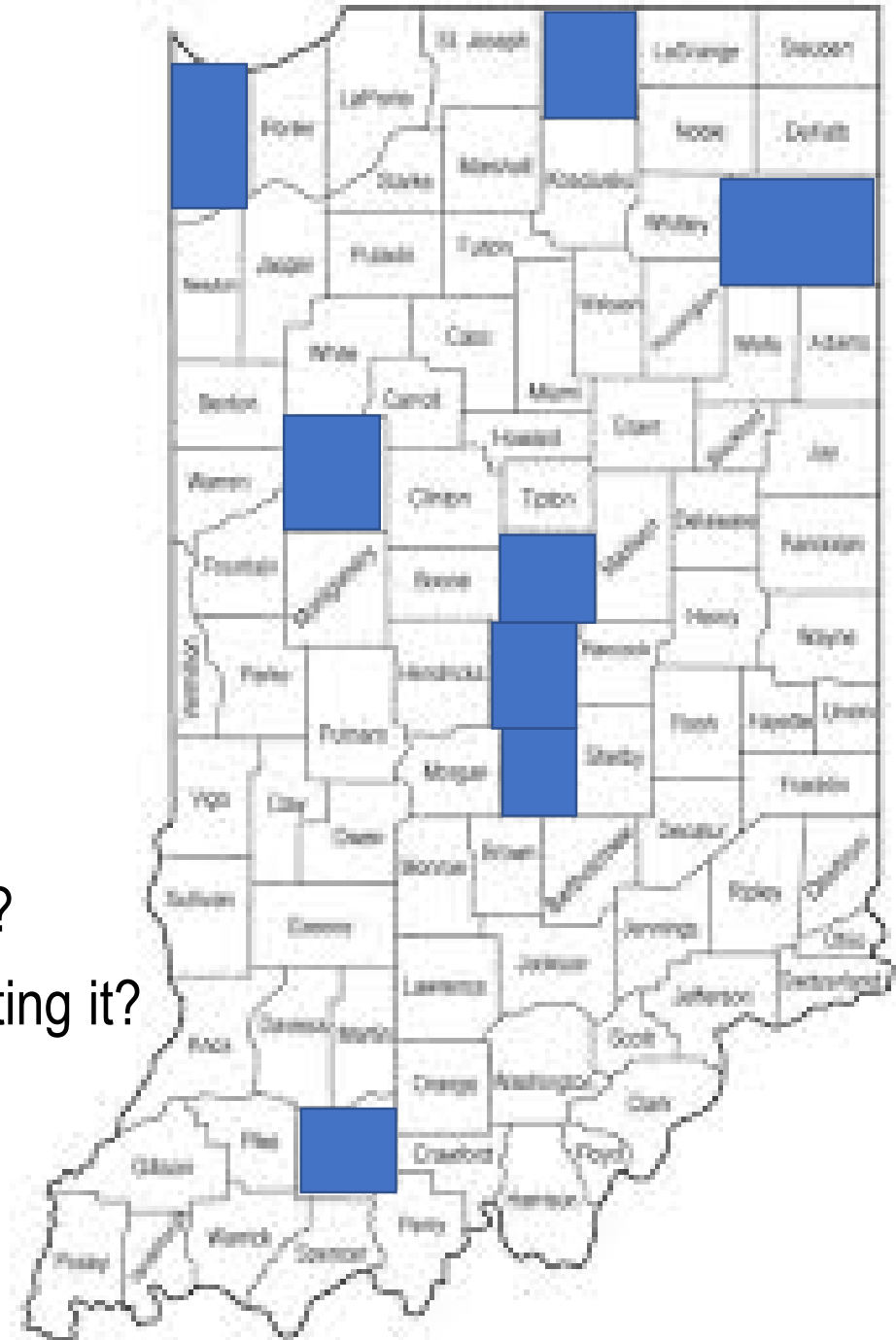
BRIDGE PRESERVATION: LOCAL AGENCY OUTREACH

THE OBSTACLES

- ➔ 40/92 +/- Counties have Engineers on Staff
- ➔ 8/92 +/- have a Bridge Engineer

How do you start a bridge preservation program:

- 1) When you are in charge of Everything Else?
- 2) When County / Elected Officials isn't expecting it?
- 3) New terminology, new materials, more complex structures?





SOME SUCCESSES



BRIDGE PRESERVATION: LOCAL AGENCY OUTREACH

SOME SUCCESSES

- ➔ Training, Research, and Implementation
- ➔ Collaboration of Partners and Industry
- ➔ Flexible Funds
- ➔ Asset Management Culture



BRIDGE PRESERVATION: LOCAL AGENCY OUTREACH

SOME SUCCESSES - TRAINING, RESEARCH, IMPLEMENTATION

→ Training

- Road Scholar Class #1: Asset Management
- Road Scholar Class #9: Bridge Basics
- County Bridge Conference
- Local Hands – On Training
- Purdue Road School
- LTAP Direct App
- Online Classes
- Close ties to Purdue Faculty and Research

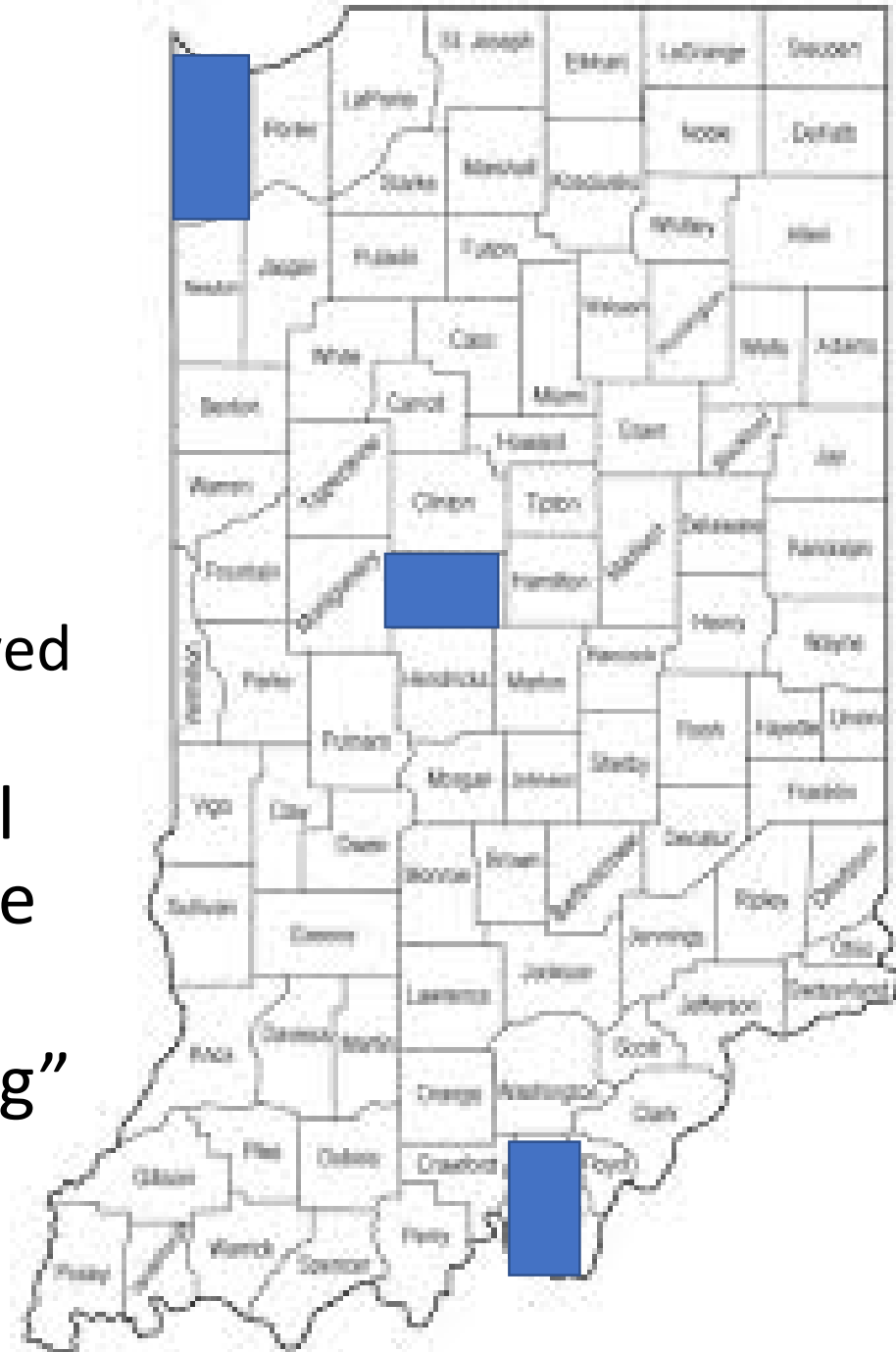


BRIDGE PRESERVATION: LOCAL AGENCY OUTREACH

**SOME SUCCESSES - TRAINING, RESEARCH,
IMPLEMENTATION**

→ Implementation

- 3 Counties
 - Innovative, Local Respect, Showed Interest in Bridge Preservation
- Paid for their travel to National Bridge Preservation Conference in 2018
- Host a local “Hands-On Training”



BRIDGE PRESERVATION
Penetrating Sealers the first
defense in Bridge Protection











BRIDGE PRESERVATION: LOCAL AGENCY OUTREACH

SOME SUCCESSES - COLLABORATION

→ Collaboration

- Local NACE Chapter (IAHCES)
- INDOT
- FHWA
- Industry
- NCBPP/MWBPP
- Indiana Legislature



BRIDGE PRESERVATION: LOCAL AGENCY OUTREACH

SOME SUCCESSES - FLEXIBLE FUNDS / ASSET MANAGEMENT CULTURE

→ Indiana Legislature

- **2016 – HB 1001**
 - Created a \$200 million Grant Program
 - Requires a Pavement Management Plan and/or Bridge Management Plan
- **2018 – HB 1290**
 - 50% MVH Funds need to be used for Construction, Reconstruction, or Preservation
 - Defines Preservation: “... included in your AMP”



BRIDGE PRESERVATION: LOCAL AGENCY OUTREACH

SOME SUCCESSES - FLEXIBLE FUNDING

→ Funding that Allows Preservation

- Cumulative Bridge Fund
- Matching Grant Program
- MVH funds
- Federal Aid
- Wheel Tax and Excise Surtax

None of our typical funding sources doesn't restrict from use for Preservation



BRIDGE PRESERVATION: LOCAL AGENCY OUTREACH

SOME SUCCESSES – ASSET MANAGEMENT CULTURE

- ➔ Building an Asset Management Culture
 - Road Scholar Class – Asset Management
 - Pavement Asset Management Workshop
 - Network Level Pavement Management Tools
 - Highlight the Champions
 - Online Course on Pavement Management
 - Fleet Management Workshops



BRIDGE PRESERVATION: LOCAL AGENCY OUTREACH

LESSONS LEARNED

→ Lessons Learned

- Changing a Culture not a Program
- There is no single “silver bullet”
- Takes “Boots on the Ground”

- Financial Incentives HELP!

THANK YOU

Patrick Conner, PE

connerp@purdue.edu

765-494-4971

 <@Itapindiana>